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ABSTRACT

A study conducted in 1987 focused on the extent to which a graduate introductory educational research course was helpful to the students who had taken it. Responses from 340 former students indicated that they had been able to utilize in their jobs basic skills developed in the course. The purpose of the present study, which focuses on those 340 former respondents who found the course helpful, sought to determine specific ways in which the course had helped them in their work. Specific items were included in the instrument from which more information could be gained about occupational categories and those topics or skills covered in the course which they found helpful. While a high percentage of the respondents were in the field of education, other fields were represented, e.g., office manager, nurse, social worker, etc. Significant differences were found between educators and non-educators in their attitudes toward the helpfulness of the course. A greater proportion of educators indicated the course was helpful in such job-related duties as interpreting standard test scores, counseling, and taking tests requiring research knowledge. Survey results are analyzed and some recommendations are made on improving and expanding the course. Data from the survey are appended. (JD)

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# An Introductory Educational Research Course: A Survey of Graduate Students Who Have Found It Helpful on the Job

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Memphis State University

Paper Presented at the Annual Meeting of the

American Educational Research Association

New Orleans, Louisiana

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

## An Introductory Educational Research Course: A Survey of Graduate Students Who Have Found It Helpful on the Job

Most graduate schools of education offer, if not require, an introductory course in educational research methods. The underlying philosophy appears to be that a course in the fundamentals of educational research is needed to equip one to become a consumer of research, even though the individual has no immediate plans for conducting research. Regardless of the field of specialization, to be able to read with understanding the reports of research conducted by others is a necessity.

Todd and Reece (1987a) conducted a study which focused on three purposes to determine the extent to which a graduate introductory educational research course was (1) helpful to students in other graduate courses they took later, (2) helpful to them in their jobs after having completed the course, and (3) helpful to them as consumers of research in reading reports published in journals, monographs, books, and other media. The population from which the sample was drawn was 825 students (693 of whom were found to be accessible) who had taken the course over a five-year period from the fall semester of 1980 through the spring semester of 1985. Of the 535 (77 percent) responses received, 340 (65 percent) of those former students indicated that they had been able to utilize in their jobs those basic skills developed in the course. It would have been of value at that time to have asked them then to indicate those parts of the course which they found specifically helpful in their jobs as well as more specific information about those jobs.

### Method

The purpose of the present study, which focused on those 340 former respondents who found the course helpful on the job, was to provide further information from them regarding their experiences in their jobs after having completed the course. A follow-up Questionnaire (see Appendix B) was developed

including items about respondents' sex, job categories and subcategories, and a checklist of 20 skills addressed in the course. This was mailed on June 23, 1986, accompanied by a cover letter explaining the purpose of the study (see Appendix A), to those 340 respondents, and this became the focus of the present study. Records show that not only students in the field of education enroll in this introductory course (though they may constitute the majority) but also students in other disciplines as well: business and medical personnel, ministers and other church workers, technical and sales personnel, legal and law enforcement personnel, social workers, homemakers, members of the armed forces, and several others. One follow-up was conducted by sending another copy of the original cover letter and a copy of the Questionnaire. From an established accessible sample of 340, 270 returns (79.4 percent) were received--57 (21.1 percent) from males and 213 (78.9 percent) from females.

In order to supplement the results of the previous survey, specific items were included in the present instrument from which more information could be gained about individuals' occupational categories and subcategories therein. Concerning the course content, respondents were to indicate by checkmarks those topics or skills covered in the course which they found helpful in their jobs. In order to obtain a total Questionnaire score, values were assigned to responses. A checkmark response was assigned a value of 1, and any item not checked was given a value of 0.

Internal consistency of the instrument was determined by correlating each item of the checklist with checklist items as a whole. Computation of a reliability coefficient, using Kuder-Richardson formula 20, yielded a satisfactory value of .77.

Content and face validity were addressed through the instrument's content being derived from the course syllabus and from responses and comments received in the previous survey.

Of the 270 respondents in nine professional and occupational categories, managerial and professional occupations such as office manager, minister, registered nurse, and others totaled 47 (17.4 percent); 42 (15.5 percent) of respondents classified themselves as educational administrators, and 150 (55.5 percent) as teachers, while 31 (11.5 percent) were represented as social worker, parole officer, church worker, homemaker, student, member of armed forces, and other. These categories and subcategories are shown in Table 1. A t-test conducted to determine whether a statistically significant difference existed between male and female respondents revealed no such sex difference in responses.

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Insert Table 1 about here

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## Results

All respondents had indicated on the previous survey that their attitude toward the course was helpful to very helpful. Descriptive statistics for the checklist items in the present study indicated that the mean number of skills checkmarked as helpful on the job was 10.50 for all respondents. The responses in the nine professional and occupational categories as reflected in the Questionnaire were tabulated as four final categories. For analytical purposes Category A (Managerial, Professional, n = 47), Category B (Education: Administration, n = 42), Category C (Education: Teaching, n = 150), and the fourth category--a new Category D (created from main occupations D through I

from the Questionnaire, n = 31) were established (see Table 1). Respective means for the four categories were 11.19, 12.43, 11.05, and 8.77. A two-way analysis of variance of sex by main occupational category revealed no significant interaction and no significant main effect for sex, but it did reveal a statistically significant main effect for occupation ($F [3,262] = 5.52$, $\underline{p} = .001$). Follow-up using the Dunn procedure revealed that the only group significantly different from other groups at the .05 level was the composite Category D group (n = 31)--a group which cannot be construed to be the focus of this study. A oneway analysis of variance of educator groups ($F[4,182] = 6.16$, $\underline{p} = .0001$) revealed that not only did elementary teachers significantly differ from teachers in higher education with regard to total number of items marked as helpful, but they also significantly differ from administrators. No such differences were found with regard to teachers in specialized teaching situations or secondary teachers.

As a result, subsequent chi square analysis of suboccupational categories, especially within the teacher subcategories, was conducted and will be reported below.

Ranked frequencies and percentages for individual checklist items for all respondents and for each main occupational category (A through D) are reported in Tables 2 through 6. As Table 2 shows, nearly 75 percent of the respondents said with reference to their jobs that the top five skills most helpful were a better understanding of research terminologies and the research process, conversing more confidently about research results, reading journal articles, and interpreting standard scores. This has implications for teachers who often interpret and communicate results of standardized tests given in schools. Nearly 53 percent of respondents indicated at least half of the 20 skills (the

top 10) were helpful to them on the job. In addition to those listed above, reading research reports, understanding research presentations in meetings, understanding charts and graphs, developing confidence in job performance, and helping others interpret research data were important.

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Insert Table 2 about here

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Insert Table 3 about here

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Insert Table 4 about here

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Insert Table 5 about here

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Insert Table 6 about here

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There were found to be statistically significant differences between educators (both teachers and administrators) and non-educators in their attitudes toward the helpfulness of the course in their respective professional positions. Fewer educators than would be expected by chance indicated the course was helpful to them in reading journal articles ($X^2 = 6.87$, df1, $p < .01$) and in preparing reports or summaries ($X^2 = 4.48$, df1, $p < .05$). On the other hand and as might be anticipated, a greater proportion of educators than expected by

chance indicated the course was helpful to them on the job in interpreting standard scores, interpreting CAT and ACT scores, interpreting computer printouts, counseling students and parents, and taking tests requiring research knowledge.

It should be kept in mind that all respondents in this second study had indicated in the previous survey that their attitude toward the course was helpful or very helpful with respect to their jobs. Further chi square analysis within the teacher and administrator occupational subcategories revealed that significant differences existed among respondents with regard to several items of the course skill descriptions. Even further inspection of responses within educational subcategories was indicated. Therefore, analysis was conducted with data for teacher subcategories, and it was observed that the checklist skills indicated as helpful on the job varied widely among teachers.

Such chi square analyses revealed more apparent variation <u>within</u> the teacher main occupation Category B than among all main occupational categories. Table 5a presents ranked frequencies of <u>all educators'</u> responses to the 20 course skills, with indication of those three items on which all teachers differed from all administrators contrasted with the 13 items on which significant differences were exhibited <u>among</u> the teacher <u>suboccupational</u> categories--especially between elementary teachers and teachers in higher education, with secondary teachers, in general, not differing significantly from either of the other two.

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Insert Table 5a about here

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Chi square analysis of teacher subgroups revealed more variation among teacher subgroups than between teachers and administrators. As would be expected, it was found that K-12 teachers do more interpretation of test scores and counseling of students and parents, while higher education teachers write more research proposals, conduct studies, and prepare reports. However, it was found that significant differences between elementary teachers and higher education teachers also existed on items such as reading journal articles, conversing about research, and pursuing research interests. Regarding pursuit of research interests, chi square analysis of educators yielded $X^2 = 43.94$, df3, $p < .0001$. Significantly higher numbers of elementary teachers than would be expected by chance indicated that they do not use such skills in association with their jobs. Tables 5b and 5c exhibit ranked frequencies of responses for the 20 course skills for elementary teachers and higher education teachers, respectively.

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Insert Table 5b about here

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Insert Table 5c about here

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Thus, nearly identical means for elementary teachers and higher education teachers, had they been found, would have masked very different underlying realities. Interest and activity in conducting research and the skills associated with generation of research (as opposed to knowledge of value in being a consumer of the research of others) increased along a continuum from elementary to secondary to higher education, with secondary teachers (generally

exhibiting roughly equivalent observed and expected frequencies) not differing significantly from either of the other two subcategories.

## Discussion

Results of this survey as well as the previous survey indicated the course should be retained as a requirement and as a prerequisite to further advanced courses. Results further suggest that perhaps the introductory educational research course could be offered with a section of the course designated in the class registration schedule as recommended for those students who expect to conduct research in the future. Results showed the course helpful to the majority of graduates in their jobs, and it has been enlightening to have asked previous respondents to supply further information concerning their jobs and specification of course skills which they have found to be of benefit in those jobs. Since nearly 70 percent of the respondents found the course helpful in understanding research presentations at meetings, there are implications for emphasizing how various kinds of research reports are put together with respect to problem, method, data gathering, and analysis. More extended analyses and synthesis of detailed results from the two studies is suggested as a basis for recommending course emphases (especially for those in certain job subcategories) as well as recommendations for course modifications.

The present study as a follow-up of the first one suggests that this course might very well be expanded to a two-semester sequence employing a comprehensive textbook such as that written by Borg and Gall (1983) as a basic text for both semesters. The fundamentals of research methodology would be taught the first semester including the writing of a research proposal, while the second semester would be devoted to conducting the proposed study which would become the master's degree thesis. During the second semester, classes would be composed of administrators in one section, elementary teachers in another, secondary teachers in a third, and professional people comprising a fourth separate class. If such were not feasible, consideration needs to be

given to at least two distinct student groups in the introductory course--those who need guidance in developing skills and habits as consumers of research (in this study--elementary teachers) and those students who will become generators of future research.

It has often been said that results of educational research do not find their way into practice. In the earlier study more than one-third of the teachers reported that the research course was not helpful on the job. In the present study which included only those who had previously reported the course as helpful, far greater numbers of elementary teachers than would be expected by chance reported not reading journal articles or research reports, not pursuing research interests, and not conversing about research; it is not surprising that little research impacts upon practice. If it is true that early years of schooling are critical, it would seem that elementary teachers possess the greatest potential for impact upon the effects of schooling.

Perhaps it is then incumbent upon administrators, who apparently are more likely to use knowledge about research in their jobs, to pass that research knowledge or awareness, in turn, to their teachers. It is suggested that research results might be appropriate topics for in-service agenda as well as regularly featured in faculty meetings. Administrators might lead or organize discussion groups which address the topic of research in general and/or specific research topics which are appropriate to the grade levels of their individual schools.

Further, a potential research topic itself could be the exploration of reasons for elementary teachers not pursuing and/or reading about current research in their areas of specialization. They are, after all, the ones who are in daily contact with youth.

One can only speculate what occurs among other elementary teachers if those who pursue graduate studies often do not utilize research knowledge.

References

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Table 1

Frequencies of All Responses to Occupational Categories and Subcategories (n = 270)

| | ---EDUCATION CATEGORIES--- | | |
|---|---|---|---|
| CATEGORY A | CATEGORY B | CATEGORY C | CATEGORY D |
| Managerial/Professional (n = 47; 17.4%) | Administration (n = 42; 15.5%) | Teaching (n = 150; 55.5%) | Technical/Sales/Other (n = 31, 11.5%) |
| 1 Office Manager | 2 Supervisor | 63 Elementary | 2 Company Employee |
| 4 Minister | 7 Principal | 28 Secondary | 5 Social Worker |
| 4 Registered Nurse | 5 Assistant Principal | 27 Higher Education | 1 Parole Officer |
| 35 Other* | 8 Higher Education/ Supervision | 21 Specialized Teaching Situation | 1 Church Worker |
| 3 No Response | 6 Guidance Counselor | 8 Other | 1 Homemaker |
| | 12 Other | 3 No Response | 9 Student |
| | 2 No Response | | 3 Military |
| | | | 7 Other |
| | | | 2 No Response |

* Other professionals included various Directors, Counselors, Therapists, Technologists, N ionists, etc.

Table 2

Ranked Frequencies of All Respondents' Checked Responses to the 20 Course Skills (n = 270)

| Frequency | Percent | Original item # | Course Descriptions/Skills |
|---|---|---|---|
| 251 | 93 | 1. | Understanding research terminology |
| 235 | 87 | 2. | Better understanding of the research process |
| 220 | 81.5 | 20. | Conversing more confidently about research |
| 213 | 78.9 | 9. | Reading journal articles |
| 202 | 74.8 | 3. | Interpreting standard scores (z/t/stanines/%ile) |
| 189 | 70 | 8. | Reading research reports |
| 186 | 68.9 | 6. | Understanding research presentions at meetings |
| 164 | 60.7 | 14. | Understanding charts and graphs |
| 149 | 55.2 | 18. | Developing confidence in job performance |
| 142 | 52.6 | 10. | Helping others interpret research data |
| 131 | 48.5 | 4. | Counseling students/parents regarding scores |
| 121 | 44.8 | 5. | Taking tests that require research knowledge |
| 121 | 44.8 | 7. | Interpreting C.A.T. and A.C.T. test scores |
| 120 | 44.4 | 15. | Preparing reports and/or summaries |
| 120 | 44.4 | 16. | Clarifying various research methodologies |
| 116 | 43 | 19. | Interpreting computer printouts |
| 85 | 31.5 | 11. | Conducting research studies |
| 79 | 29.3 | 13. | Constructing charts and graphs |
| 78 | 28.9 | 12. | Writing research proposals |
| 56 | 20.7 | 17. | Pursuing other research/statistics interests |

Table 3

Ranked Frequencies of Managerial/Professional* Respondents' Checked Responses to the 20 Course Skills (n = 47)

| Frequency | Percent | Original item # | Course Descriptions/Skills |
|---|---|---|---|
| 44 | 93.6 | 9. | Reading journal articles |
| 43 | 91.5 | 1. | Understanding research terminology |
| 42 | 89.4 | 20. | Conversing more confidently about research |
| 41 | 87.2 | 2. | Better understanding of the research process |
| 40 | 85.1 | 8. | Reading research reports |
| 37 | 78.7 | 6. | Understanding research presentions at meetings |
| 31 | 66 | 14. | Understanding charts and graphs |
| 30 | 63.8 | 15. | Preparing reports and/or summaries |
| 29 | 61.7 | 3. | Interpreting standard scores (z/t/stanines/%ile) |
| 29 | 61.7 | 10. | Helping others interpret research data |
| 25 | 53.2 | 18. | Developing confidence in job performance |
| 21 | 44.7 | 11. | Conducting research studies |
| 19 | 40.4 | 12. | Writing research proposals |
| 19 | 40.4 | 13. | Constructing charts and graphs |
| 18 | 38.3 | 16. | Clarifying various research methodologies |
| 18 | 38.3 | 19. | Interpreting computer printouts |
| 15 | 31.9 | 17. | Pursuing other research/statistics interests |
| 12 | 25.5 | 5. | Taking tests that require research knowledge |
| 7 | 14.9 | 4. | Counseling students/parents regarding scores |
| 6 | 12.8 | 7. | Interpreting C.A.T. and A.C.T. test scores |

* Included various Ministers, Nurses, Directors, Counselors, Therapists, Medical Technologists, Nutritionists, and others

Table 4

Ranked Frequencies of Educational Administrators' Checked Responses to the 20 Course Skills (n = 42)

| Frequency | Percent | Original item # | Course Descriptions/Skills |
|---|---|---|---|
| 41 | 97.6 | 1. | Understanding research terminology |
| 38 | 90.5 | 2. | Better understanding of the research process |
| 37 | 88.1 | 20. | Conversing more confidently about research |
| 35 | 83.3 | 6. | Understanding research presentions at meetings |
| 33 | 78.6 | 3. | Interpreting standard scores (z/t/stanines/%ile) |
| 33 | 78.6 | 9. | Reading journal articles |
| 33 | 78.6 | 14. | Understanding charts and graphs |
| 30 | 71.4 | 8. | Reading research reports |
| 28 | 66.7 | 4. | Counseling students/parents regarding scores |
| 28 | 66.7 | 10. | Helping others interpret research data |
| 26 | 61.9 | 15. | Preparing reports and/or summaries |
| 25 | 59.5 | 18. | Developing confidence in job performance |
| 24 | 57.1 | 7. | Interpreting C.A.T. and A.C.T. test scores |
| 24 | 57.1 | 19. | Interpreting computer printouts |
| 22 | 52.4 | 16. | Clarifying various research methodologies |
| 18 | 42.9 | 5. | Taking tests that require research knowledge |
| 16 | 38.1 | 13. | Constructing charts and graphs |
| 14 | 33.3 | 11. | Conducting research studies |
| 10 | 23.8 | 12. | Writing research proposals |
| 7 | 16.7 | 17. | Pursuing other research/statistics interests |

Table 5

Ranked Frequencies of Teachers' Checked Responses to the 20 Course Skills (n = 150)

| Frequency | Percent | Original item # | Course Descriptions/Skills |
|---|---|---|---|
| 140 | 93.3 | 1. | Understanding research terminology |
| 131 | 87.3 | 2. | Better understanding of the research process |
| 124 | 82.7 | 3. | Interpreting standard scores (z/t/stanines/%ile) |
| 120 | 80 | 20. | Conversing more confidently about research |
| 110 | 73.3 | 9. | Reading journal articles |
| 99 | 66 | 8. | Reading research reports |
| 96 | 64 | 6. | Understanding research presentions at meetings |
| 91 | 60.7 | 4. | Counseling students/parents regarding scores |
| 84 | 56 | 7. | Interpreting C.A.T. and A.C.T. test scores |
| 84 | 56 | 14. | Understanding charts and graphs |
| 83 | 55.3 | 5. | Taking tests that require research knowledge |
| 82 | 54.7 | 18. | Developing confidence in job performance |
| 76 | 50.7 | 10. | Helping others interpret research data |
| 69 | 46 | 16. | Clarifying various research methodologies |
| 67 | 44.7 | 19. | Interpreting computer printouts |
| 51 | 34 | 15. | Preparing reports and/or summaries |
| 40 | 26.7 | 11. | Conducting research studies |
| 40 | 26.7 | 12. | Writing research proposals |
| 40 | 26.7 | 13. | Constructing charts and graphs |
| 31 | 20.7 | 17. | Pursuing other research/statistics interests |

Table 6

Ranked Frequencies of All Others' Checked Responses to the 20 Course Skills (n = 31)

| Frequency | Percent | Original item # | Course Descriptions/Skills |
|---|---|---|---|
| 27 | 87.1 | 1. | Understanding research terminology |
| 26 | 83.9 | 9. | Reading journal articles |
| 25 | 80.6 | 2. | Better understanding of the research process |
| 21 | 67.7 | 20. | Conversing more confidently about research |
| 20 | 64.5 | 8. | Reading research reports |
| 18 | 58.1 | 6. | Understanding research presentions at meetings |
| 17 | 54.8 | 18. | Developing confidence in job performance |
| 16 | 51.6 | 3. | Interpreting standard scores (z/t/stanines/%ile) |
| 16 | 51.6 | 14. | Understanding charts and graphs |
| 13 | 41.9 | 15. | Preparing reports and/or summaries |
| 11 | 35.5 | 16. | Clarifying various research methodologies |
| 10 | 32.3 | 11. | Conducting research studies |
| 9 | 29 | 10. | Helping others interpret research data |
| 9 | 29 | 12. | Writing research proposals |
| 8 | 25.8 | 5. | Taking tests that require research knowledge |
| 7 | 22.6 | 7. | Interpreting C.A.T. and A.C.T. test scores |
| 7 | 22.6 | 19. | Interpreting computer printouts |
| 5 | 16.1 | 4. | Counseling students/parents regarding scores |
| 4 | 12.9 | 13. | Constructing charts and graphs |
| 3 | 9.7 | 17. | Pursuing other research/statistics interests |

Table 5a

Ranked Frequencies of All Educators' Checked Responses to the 20 Course Skills

(n = 192)

| Frequency | Percent | Original item # | Course Descriptions/Skills | (1) | (2) |
|---|---|---|---|---|---|
| 181 | 94.3 | 1. | Understanding research terminology | | |
| 169 | 88 | 2. | Better understanding of the research process | | |
| 157 | 81.8 | 3. | Interpreting standard scores (z/t/stanines/%ile) | | |
| 157 | 81.8 | 20. | Conversing more confidently about research | | * |
| 143 | 74.5 | 9. | Reading journal articles | | * |
| 131 | 68.2 | 6. | Understanding research presentions at meetings | ** | |
| 129 | 67.2 | 8. | Reading research reports | | * |
| 119 | 62 | 4. | Counseling students/parents regarding scores | | * |
| 117 | 60.9 | 14. | Understanding charts and graphs | ** | |
| 108 | 56.3 | 7. | Interpreting C.A.T. and A.C.T. test scores | | * |
| 107 | 55.7 | 18. | Developing confidence in job performance | | |
| 104 | 54.2 | 10. | Helping others interpret research data | | * |
| 101 | 52.6 | 5. | Taking tests that require research knowledge | | * |
| 91 | 47.4 | 19. | Interpreting computer printouts | | |
| 91 | 47.4 | 16. | Clarifying various research methodologies | | * |
| 77 | 40.1 | 15. | Preparing reports and/or summaries | ** | * |
| 56 | 29.2 | 13. | Constructing charts and graphs | | * |
| 54 | 28.1 | 11. | Conducting research studies | | * |
| 50 | 26 | 12. | Writing research proposals | | * |
| 38 | 19.8 | 17. | Pursuing other research/statistics interests | | * |

(1) **signifies items on which teachers and administrators exhibited significant differences between proportions in expected and observed number of responses ($p < .05$)

(2) * signifies items on which significant differences among teacher subgroups were exhibited

Table 5b

Ranked Frequencies of Elementary Teachers' Checked Responses to the 20 Course Skills (n = 63)

| Frequency | Percent | Original item # | Course Descriptions/Skills |
|---|---|---|---|
| 58 | 92.1 | 1. | Understanding research terminology |
| 56 | 88.9 | 3. | Interpreting standard scores (z/t/stanines/%ile) |
| 52 | 82.5 | 2. | Better understanding of the research process |
| 48 | 76.2 | 4. | Counseling students/parents regarding scores |
| 46 | 73 | 7. | Interpreting C.A.T. and A.C.T. test scores |
| 44 | 69.8 | 20. | Conversing more confidently about research |
| 39 | 61.9 | 5. | Taking tests that require research knowledge |
| 38 | 60.3 | 9. | Reading journal articles |
| 37 | 58.7 | 6. | Understanding research presentions at meetings |
| 34 | 54 | 18. | Developing confidence in job performance |
| 33 | 52.4 | 8. | Reading research reports |
| 33 | 52.4 | 14. | Understanding charts and graphs |
| 32 | 50.8 | 19. | Interpreting computer printouts |
| 22 | 34.9 | 10. | Helping others interpret research data |
| 20 | 31.7 | 16. | Clarifying various research methodologies |
| 11 | 17.5 | 15. | Preparing reports and/or summaries |
| 10 | 15.9 | 13. | Constructing charts and graphs |
| 6 | 9.5 | 11. | Conducting research studies |
| 5 | 7.9 | 12. | Writing research proposals |
| 4 | 6.3 | 17. | Pursuing other research/statistics interests |

Table 5c

Ranked Frequencies of Higher Education Teachers' Checked Responses to the 20 Course Skills (n = 27)

| Frequency | Percent | Original item # | Course Descriptions/Skills |
|---|---|---|---|
| 27 | 100 | 1. | Understanding research terminology |
| 27 | 100 | 20. | Conversing more confidently about research |
| 26 | 96.3 | 2. | Better understanding of the research process |
| 26 | 96.3 | 8. | Reading research reports |
| 26 | 96.3 | 9. | Reading journal articles |
| 23 | 85.2 | 6. | Understanding research presentions at meetings |
| 21 | 77.8 | 3. | Interpreting standard scores (z/t/stanines/%ile) |
| 21 | 77.8 | 10. | Helping others interpret research data |
| 21 | 77.8 | 12. | Writing research proposals |
| 20 | 74.1 | 11. | Conducting research studies |
| 20 | 74.1 | 16. | Clarifying various research methodologies |
| 18 | 66.7 | 17. | Pursuing other research/statistics interests |
| 17 | 63 | 14. | Understanding charts and graphs |
| 15 | 55.6 | 15. | Preparing reports and/or summaries |
| 15 | 55.6 | 18. | Developing confidence in job performance |
| 14 | 51.9 | 13. | Constructing charts and graphs |
| 13 | 48.1 | 19. | Interpreting computer printouts |
| 8 | 29.6 | 5. | Taking tests that require research knowledge |
| 4 | 14.8 | 4. | Counseling students/parents regarding scores |
| 4 | 14.8 | 7. | Interpreting C.A.T. and A.C.T. test scores |

Appendix A

MEMPHIS STATE UNIVERSITY
College of Education
MEMPHIS, TENNESSEE 38152

Department of
Foundations of Education

June 23, 1986

Dear Former Student:

Recently you received a Questionnaire-Opinionnaire concerning the helpfulness that EDRS 7521, Introduction to Educational Research, had been to you. I want to thank you for taking the time to complete it and return it to me. Your response has been of great help. If you have previously indicated a desire for an abstract of the results of the study, it will be sent to you just as soon as it is prepared, hopefully within the next two weeks.

One of the questions asked was, "To what extent has this course been of help to you in your job?" You were one of a number of people who indicated that the course was Helpful to Very Helpful to you in your work.

As a part of the study, I am interested now in determining specifically how the course has been helpful in your work. Enclosed is a short form on which I have asked that you indicate specifically what your job is and specifically the ways in which the course is helpful to you.

I hope that you will take a few minutes to complete this form. Your response will be held confidential. A postage-paid envelope is enclosed for your convenience.

Thank you again for your cooperation.

Sincerely,

Robert F. Todd

Robert F. Todd
Associate Professor

Appendix B

EDRS 7521. Introduction to Educational Research: Its Helpfulness on the Job

Please circle the letter of your response to each of the following questions.

1. What is your sex? A. Male B. Female

2. Into which of the following categories does your occupation or profession most clearly belong? Circle general headings as well as specific clarifications. Please be as specific as possible. Feel free to write in specifics as you deem necessary for clarification.

   A. MANAGERIAL, PROFESSIONAL (Office Manager, Lawyer, Minister, Registered Nurse, Other (write in) _____

   B. EDUCATION: ADMINISTRATION (Supervisor, Principal, Asst. Principal, Superintendent, Asst. Superintendent, Higher Education, Supervision, Guidance Counselor, Other (write in)_____

   C. EDUCATION: TEACHING (Elementary, Secondary, Higher Education, Technical School, Specialized Teaching Situation (specify), Other (write in)
   _____

   D. TECHNICAL, SALES, ADMINISTRATIVE SUPPORT (Secretary, Computer Operator, Account Executive, Bank Teller, Company Employee (specify)_____
   Other (write in)_____

   E. SERVICE (Licensed Practical Nurse, Child Care Worker, Social Worker, Police Officer, Fireman, Parole Officer, Church Worker)

   F. HOMEMAKER

   G. STUDENT

   H. MEMBER OF ARMED FORCES

   I. Other (write in; please be as specific as possible _____

Please place a check in the blanks of all of the following ways in which the course, Introduction to Educational Research, is helpful to you on your job.

_____ 1. Understanding research terminology
_____ 2. Developing a better understanding of the research process
_____ 3. Interpreting standard scores (z-scores, T-scores, stanines, percentiles)
_____ 4. Counseling students/parents on the basis of test score interpretation
_____ 5. Taking tests that require research knowledge, statistical concepts, or research methodology (Career Ladder Tests, Graduate Record Exam, National Teacher Exam)
_____ 6. Understanding research presentations at meetings
_____ 7. Interpreting C.A.T. and A.C.T. test scores
_____ 8. Reading research reports
_____ 9. Reading journal articles
_____10. Helping others interpret research data
_____11. Conducting research studies
_____12. Writing research proposals
_____13. Constructing charts and graphs
_____14. Understanding charts and graphs
_____15. Preparing reports and/or summaries
_____16. Clarifying the various research methodologies (Experimental, Ex Post Facto, Descriptive, Historical)
_____17. Pursuing other research and statistics interests
_____18. Developing confidence in job performance
_____19. Interpreting computer print-outs
_____20. Conversing with others in a more confident way concerning research reports, findings, and results

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